

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Custom Resins, Inc.

Kentucky Manufacturing Assistance Center

KMAC Helps Custom Resins Increase Throughput and Improve Productivity

Client Profile:

Custom Resins, located in Henderson, Kentucky, manufactures Nylene®, a line of nylon molding resins that can be used in nearly all thermoplastic processing operations and offers customized performance as compared to more traditional grades of nylon. Due to the unique characteristics of Nylene®, Custom Resins' customers can realize improved processing characteristics in extrusion processes and increased ability of their molded products to withstand impact and stress. The company employs 50 people.

Situation:

Faced with an increasing demand for their products along with an expanding array of special-use Nylene® products, Custom Resins was looking for ways to improve production throughput using their existing resources. Custom Resins chose to work with Kentucky Manufacturing Assistance Center (KMAC), a NIST MEP network affiliate, to help them achieve their goal by implementing Lean manufacturing techniques.

Solution:

KMAC staff delivered on-site introductory training in Lean manufacturing (Lean 101) followed by a Value Stream Mapping (VSM) class and two mapping events. Based on the Future State Maps developed by the Custom Resins/KMAC team, the company developed a prioritized action list whose implementation had the potential to provide a 70 percent reduction in their process time in the compounding area and a 50 percent lead time reduction in the stihl production area. KMAC also led training and implementation of 5S / Workplace Organization. During the KMAC-led 5S kaizen events, the Custom Resins' team completed 45 improvement items which resulted in less time spent hunting for tools, more floor space freed-up, and overall increased productivity. KMAC also helped Custom Resins apply the concept of Single Minute of Die Exchange (SMED) in order to setup and changeover time. In their first KMAC-led Quick Changeover event, Custom Resins' team achieved a 48 percent reduction in changeover time which translated into an additional 22,000 pounds of throughput per month on one machine and these results could be replicated on three more machines.

Results:

- * Increased sales by \$200,000.
- * Realized \$50,000 in cost savings.
- * Avoided \$75,000 in expansion costs.
- * Improved employee morale and involvement.

Testimonial:

www.mep.nist.gov



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"As a result of our work with KMAC, we have become more productive and profitable. We've learned ways to work smarter and be more effective using our existing resources. Our customers are happier, employee morale is higher, and our bottom-line is stronger."

Herb Rawlings, Vice President, Operations